

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Operating Systems

Subject Code

:

06EC751

IA Marks

:

25

No. of Lecture Hrs/ Week

:

04

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Exam Hrs

:

03

Total no. of Lecture Hrs.

:

52

Exam Marks

:

100

PART - A

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Unit - 1 Introduction and Overview Of Operating SYSTEMS:

Operating system, Goals of an O.S, Operation of an O.S, Resource allocation and related functions, User interface related functions, Classes of operating systems, O.S and the computer system, Batch processing system, Multi programming systems, Time sharing systems, Real time operating systems, distributed operating systems.

6 Hours

Unit - 2 Structure of the Operating Systems:

Operation of an O.S, Structure of the supervisor, Configuring and installing of the supervisor, Operating system with monolithic structure, layered design, Virtual machine operating systems, Kernel based operating systems, and Microkernel based operating systems.

7 Hours

Unit - 3 Process Management:

Process concept, Programmer view of processes, OS view of processes, Interacting processes, Threads, Processes in UNIX, Threads in Solaris.

6 Hours

Unit- 4

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

1. **Operating Systems Concepts** – Silberschatz and Galvin, John Wiley, 5th Edition, 2001.

2. **Operating System – Internals and Design Systems**– Willaim Stalling, Pearson Education, 4th Ed, 2006.

DIGITAL SIGNAL COMPRESSION

Subject Code

:

06TE752

IA Marks

:

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

25

No. of Lecture Hrs/ Week

:

04

Exam Hrs

:

03

Total no. of Lecture Hrs.

:

52

Exam Marks

Reference BOOKs:

1. **Introduction to Data Compression** – K. Sayood, Harcourt India Pvt. Ltd. & Morgan Kaufmann Publishers, 1996.
2. **Digital Coding of Waveforms** – N. Jayant and P. Noll,
3. **Principles and Applications to Speech and Video** – Prentice Hall, USA, 1984.
4. **Data Compression: The Complete Reference**– D. Salomon,”” Springer, 2000.
5. **Fundamentals of Multimedia**– Z. Li and M.S. Drew, “,” Pearson Education (Asia) Pte. Ltd., 2004.

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Artificial Neural Networks

Subject Code

:

06EC753

IA Marks

:

25

No. of Lecture Hrs/ Week

:

04

Exam Hrs

:

03

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Unit - 2 Supervised learning, single layer networks, perceptions, linear separability, perceptions training algorithm, guarantees of success, modifications. S

6 Hours

Unit - 3

Multiclass networks-I, multilevel discrimination, preliminaries, backs propagation, setting parameter values, theoretical results.

6 Hours

Unit - 4

Accelerating learning process, application, mandaline, adaptive multilayer networks.

7 Hours

PART - B

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Unit - 5 Prediction networks, radial basis functions, polynomial networks, regularization, unsupervised learning, winner take all networks.

6 Hours

Unit - 6

Learning vector quantizing, counter propagation networks, adaptive resonance theorem, topologically organized networks, distance based learning, neo-cognition.

7 Hours

Unit - 7 Associative models, hop field networks, brain state networks, Boltzmann machines, hetero associations.

7 Hours

Unit - 8

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Reference Books:

1. **Artificial neural networks**– R. Schalkoff, , MGH, 1997.
2. **Introduction to artificial neural systems** – J. Zurada, Jaico, 2003.
3. **Neural networks** – Haykins, Pearson Edu., 1999.

CAD for VLSI

Subject Code

:

06TE754

IA Marks

:

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

25

No. of Lecture Hrs/ Week

:

04

Exam Hrs

:

03

Total no. of Lecture Hrs.

:

52

Exam Marks

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Unit - 6 Introduction, models and transformation for combinational networks, algebraic models, Boolean models.

Multilevel Combinational Logic Optimization: Introduction, models and transformation for combinational networks, algebraic models, Boolean models.

9 Hours

Unit -7 Introduction, Sequential Circuit, Optimization using state – base models.

Sequential Logic Optimization: Introduction, Sequential Circuit, Optimization using state – base models.

3 Hours

Unit - 8 Introduction, Shadow registers and scan design, counter testability, testing stuck – At faults, Boolean differences, PLA testgability, PLA performance estimation, Design simulation.

Testability of VLSI: Introduction, Shadow registers and scan design, counter testability, testing stuck – At faults, Boolean differences, PLA testgability, PLA performance estimation, Design simulation.

8 Hours

Text Books:

ELECTIVE - 2 (Group B)

Written by Administrator

Saturday, 07 November 2009 07:47 -

1. **Introduction to VLSI Design** – Eugene D Fabricius, MGH, 1990
2. **Synthesis and Optimization of digital circuits** – Giovanni De Micheli, MGH 1994

ATM Networks

Subject Code

:

06EC755

IA Marks

:

25

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

No. of Lecture Hrs/ Week

:

04

Exam Hrs

:

03

Total no. of Lecture Hrs.

:

52

Exam Marks

:

100

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

PART - A

Unit - 1 Overview of ATM, Introduction, Circuit switching, Routing, virtual circuit Switching, Comparison of transfer modes. Motivation for ATM, Basic properties.

TRANSFER MODES: Overview of ATM, Introduction, Circuit switching, Routing, virtual circuit Switching, Comparison of transfer modes. Motivation for ATM, Basic properties.

6 Hours

Unit - 2 Core aspects, ATM Networks, Architecture and interfaces, Internetworking, Applications, BISDN and ATM, ATM Standardization.

ATM Reference Model: Core aspects, ATM Networks, Architecture and interfaces, Internetworking, Applications, BISDN and ATM, ATM Standardization.

6 Hours

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

tion, Pearson Education Asia, 2006.

2. **Sourcebook of ATM and IP internetworking**– Khalid Ahmed, Wiley inter science, 2002.

Image Processing

Subject Code

:

	06EC756
IA Marks	

:

25

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

No. of Lecture Hrs/ Week

:

04

Exam Hrs

:

03

Total no. of Lecture Hrs.

:

52

Exam Marks

:

100

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Text Book:

1 **Digital Image processing**– Rafael C.Gonzalez and Richard E.Woods, Pearson Education, 2001, 2nd edition.

Reference Books:

1. **Fundamentals of Digital Image Processing**– Anil K. Jain, Pearson Edun, 2001.
2. **Digital Image Processing and Analysis** – B. Chanda and D. Dutta Majumdar, PHI, 2003.

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Video Engineering

Subject Code

:

06EC758

IA Marks

:

25

No. of Lecture Hrs/ Week

:

04

Exam Hrs

:

ELECTIVE - 2 (Group B)

Written by Administrator
Saturday, 07 November 2009 07:47 -

Text Book:

1. **Video Demystified** – Keith Jack, 4th Edn, Elsevier, 2007.

Reference Book:

2. **Modern TV Practice** – R.R.Gulati, 2nd Edn, New age Intl. publications.